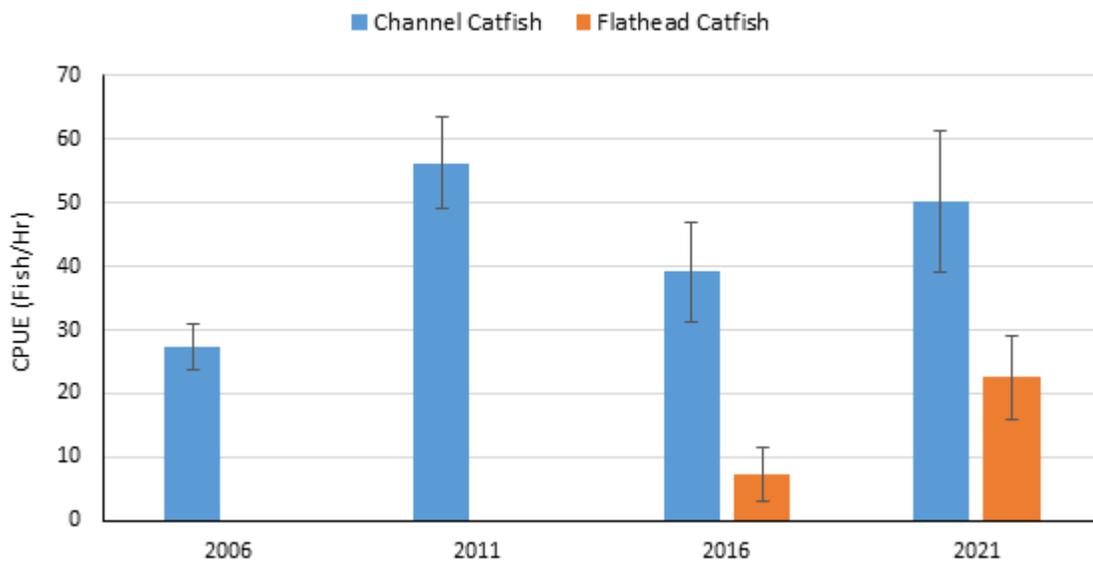


Freshwater Fisheries Monthly Report – October 2021

Freshwater Fisheries - Stock Assessment

Potomac River Catfish Survey - Completed a catfish electrofishing survey on the upper Potomac River. Sample stations were in the section of river between Dam 3 and Dam 5. Survey results show increased catch rates for channel catfish larger than 16 inches from 2016 to 2021 at 50 fish/hour. Of note is the increase in catch rates for invasive flathead catfish between 2016 and 2021. Catch rates for flathead catfish larger than 16 inches increased from 7.5 fish/hour to 22.5 fish/hour. This invasive catfish continues to increase in abundance and distribution within the river. Anglers are reminded that transporting live flathead catfish between water bodies is illegal and carries a fine up to \$2,500.



Trout Surveys - Conducted a pre-construction electrofishing survey of the Piney Run brown trout population at a restoration site in Baltimore County.

Conducted the annual Gunpowder Falls tailwater sampling in the dam/falls, Masemore Road, and Blue Mount stations. Data is being processed but preliminary results show low brown trout young-of-year (YOY) recruitment with good densities of 1-year and older brown trout at all sites.

Upcoming - Conducting multiple nighttime boat electrofishing surveys at randomly selected sites around the perimeter of Prettyboy Reservoir to assess black bass and sunfish populations.

Lake Artemesia - Surveyed Lake Artemesia (Prince George’s County), a property owned by Maryland National Capital Park and Planning Commission in College Park. Crews found numerous largemouth bass of multiple size classes, especially fish reproduced in spring 2021. Of note, crews also caught and documented multiple year-classes of the invasive Northern snakehead. There also appears to be a healthy population of bluegill sunfish; the sunfish population will be assessed in spring 2022.

Eastern Region Impoundment Surveys - Completed largemouth bass surveys of Leonards Mill Pond and Wye Mills Lake. Both impoundments had abundant bass populations, with ample juveniles and adults. Some bass encountered were quite large. Both impoundments support abundant panfish populations. Large redear sunfish and bluegills were commonly encountered.



Freshwater Fisheries - Habitat and Water Quality

Environmental Review - Provided aquatic resource information and/or comments for the following environmental review projects:

- An application submitted for the installation of a culvert for a residential driveway on Rock Lodge Road in McHenry. The intent of the project is to realign a small waterway for the installation of a driveway for residential construction. Comments were provided for time of year restrictions with the focus on Best Management Practices for sediment and erosion control.
- A review of Green Ridge State Forest annual work plan for FY23. The plan consisted of four timber harvests totaling 174 acres. Water resources with the harvest areas will be clearly marked and protected accordingly with proper buffering and other best management practices.
- A review of Savage River State Forest annual work plan for FY23. Seven cuts and thinnings were proposed. Staff reviewed water resources associated with the cuts and thinnings to ensure proper buffering.
- Input was provided for the new water appropriation permit for the Lake Habeeb dam at Rocky Gap State Park. In recent years, increased bottom release flow from the dam has provided cooler temperatures and improved water quality downstream in Rocky Gap Run. These conditions have allowed the brook trout population in Rocky Gap Run to grow and thrive. Guidance was provided to Maryland Park Service staff to increase the minimum flow limit on the permit and modify the annual dam release guidelines to optimize flows during spawning season and minimize the potential for the spillover of warmer surface waters during the summer.
- A transmission line replacement in Harford County and Baltimore County. The project would involve work activities that would cross several streams that support brook trout and brown trout. Recommendations to minimize impacts to aquatic resources included limitations to activities during critical times of year, sediment and erosion control best management practices, and avoidance of riparian buffer disturbance.

- Conducted a site visit to Carroll Branch stream restoration site in Baltimore County to provide advice on structure placement in order to minimize impacts to trout spawning.
- Participated in an environmental review call with the Maryland Department of the Environment regarding the sharing of coldwater data between agencies.

Fish Kill - Responded to a report of a fish kill on the North Branch of the Potomac River near the town of Westernport. An angler reported seeing multiple species of fish behaving oddly and a number of dead fish in slower water. Maryland Department of the Environment's fish kill investigation program was contacted and water quality tests were performed the day after the report. All water quality parameters were within acceptable ranges and the cause of the minor kill is uncertain. Local guides are continuing to stay alert for dead or dying fish and will notify staff if they encounter them.

Temperature Monitoring - Concluded the stream temperature monitoring index period by removing deployed WaterTemp Pro water temperature recorders from streams within the central region for evaluation.

Freshwater Fisheries - Stocking and Population Management

Trout - The Youghiogheny River catch-and-return management area received a maintenance stocking of 500 (2.7/lb) rainbow trout from Bear Creek Hatchery.

Assisted Bear Creek Hatchery with stocking the North Branch Potomac River delayed harvest area with trout. Due to the difficulty at these stocking locations, a "bucket brigade" approach was used to facilitate stocking efforts. Also assisted Albert Powell Trout Hatchery staff with trout stocking in Central Region streams.

Approximately 3,000 juvenile brown trout were stocked into the mainstem of Antietam Creek in Washington County. Stops were made at access points from the Pennsylvania border downstream to Sharpsburg. Annual stocking of hatchery reared brown and rainbow trout in the mainstem of the creek helps support this highly productive fishery.

Attended a riparian buffer meeting with the Washington County Soil Conservation District and Trout Unlimited. The meeting facilitated a discussion that could lead to more grant opportunities for riparian buffer planting and livestock exclusion fencing in watersheds that support brook trout and brown trout in Washington County.

Sunfish - Approximately 5,000 juvenile bluegill and redear sunfish were stocked in Middletown Pond (Frederick County), which had been recently drained and dredged to increase pond depth. Approximately 1,000 sunfish were stocked at Boonsboro Pond (Washington County) which is a youth, senior, and blind angler fishing area. These sunfish will reach a catchable size in the next 1-2 years.



Juvenile redear sunfish

Stocking Permits – Eight stocking permits were processed and issued in October.

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- Deep Creek Lake information.
- Upper Potomac River conditions and muskie fishing.
- Fishing license information.
- Pond stocking guidance.
- Processed three Scientific Collection Permits.
- Provided customer assistance on 13 emails. Concerns ranged from trout stocking to pond management.

School Program - Met with high school students visiting the area from Gunston School in Centreville, Queen Anne's County as part of their Chesapeake Watershed Semester. Topics focused on headwater streams and their importance to overall Bay health. Brook trout, their life history, and their importance as indicators of good water quality were also discussed.

Master Naturalist Program– Provided an Aquatic Ecosystems/Freshwater Fish class for the Maryland Master Naturalist Program at North Point State Park in Baltimore County. The class was instructed on the different aquatic ecosystems in Maryland, the threats to the stream ecosystems, and the importance of the riparian buffers for protection of the resource. A powerpoint presentation on the Fishes of Maryland, with focus on fish found in their region, was also provided. Participants were then able to practice keying fishes from most of the 23 families of freshwater fishes found in Maryland.

Freshwater Fisheries - Angler Access

Fishery Management Areas - Continues to monitor and maintain the Evitts Creek, Black Oak, and McCoolle Fishery Management Areas. Trash cleanup and lawn maintenance have been completed at all locations. During scheduled maintenance at the Evitts Creek FMA, staff discovered no flow coming from the supply pipe. The intake pipe was not in place at the supply dam due to being dislodged during hurricane Ida. Western Region I staff obtained materials, fixed, and restored flows.

Signage - Checked and replaced regulation signs as needed at different management areas throughout Garrett County. Delayed harvest areas were checked to ensure proper signage was in place before the time of year for catch-and-release restrictions. Staff also replaced signs at the Barnum put-and-take trout area after Natural Resource Police reported all signs within the management area had been taken down.

Piney Reservoir Angler Access - Met with the city of Frostburg to discuss the possibility of improving angling access on Piney Reservoir in Garrett County. Piney Reservoir is the drinking water supply for the city and has had a standing no-boating policy in place. The city was presented with the option to investigate a change in their no-boating policy and discuss their concerns during a future all-hands meeting to be facilitated by department staff. In addition, grants available from Program Open Space and the Waterway Improvement Fund, may provide funding for a soft launch for paddle-craft as well as a handicap-access for anglers with disabilities.

Freshwater Fisheries - Invasive Species

Blue Catfish - Staff are collaborating with Salisbury University to complete a study of invasive blue catfish in the Nanticoke River and Marshyhope Creek. The study is focused on gathering life history data (age and growth) and diet. The first round of blue catfish were collected with electrofishing. A wide variety of individuals were collected from 5 inches long to almost 50 pounds.



Continued work aging Patuxent River blue catfish otoliths. Otoliths from roughly 2,000 of the invasive fish collected will be used to estimate growth and assess population structure.

Freshwater Fisheries - Brook Trout Program

Attended a meeting with staff from Maryland Department of the Environment and private sector engineers to discuss the use of smart stormwater management ponds to protect thermally sensitive streams. Smart stormwater management ponds use a dam valve system that is connected to a wireless network and can be programmed to hold or release water as needed.

Currently, the smart stormwater management ponds are not used in thermally sensitive watersheds and only treat runoff for sediment and nutrients. The site visit continued an ongoing discussion about programming the ponds for thermal protection and ways to test the temperature treatment programming before use in thermally sensitive watersheds.

Attended the fall meeting of the Chesapeake Bay Program Brook Trout Work Group. Discussion topics included updates to the Work Group's science needs and to the work plan.

Attended a riparian buffer meeting with the Washington County Soil Conservation District and Trout Unlimited. The meeting facilitated a discussion that could lead to more grant opportunities for riparian buffer planting and livestock exclusion fencing in watersheds that support brook trout and brown trout in Washington County.

Attended a kick off meeting for a stormwater management temperature monitoring project led by researchers at University of Maryland, Baltimore County. The project will collect data to determine the influence of different stormwater management practices on the thermal regime of Dead Run. The results of the project are expected to provide insight into what stormwater management practices will provide the most thermal protection for streams that support coldwater fisheries resources.

Reviewed applications and submitted a recommendation of candidates to form the new Coldwater Fisheries Advisory Committee to SFAC for approval. All candidates were approved and notified. CFAC will support FABS and advocate for protection and conservation of our coldwater resources.

Freshwater Fisheries - Tidal Bass Program

The Tidal Bass Survey completed its tidewater survey of Potomac River, Gunpowder River, Middle River, Bush River, Susquehanna River and the flats, Northeast River, Chester River, and Choptank River. Data will be uploaded to the Freshwater Fisheries Program's database and analyzed during winter 2022.



Young largemouth bass initially propagated by the Manning Hatchery and later transported to Wheelabrator, Inc. for growing out, were stocked in the Gunpowder River.

The Black Bass Advisory Committee meeting concluded after introductions by new members with ideas for new agenda topics in January; a summary of motions and actions with upcoming agenda topics have been posted on the [committee's website](#).

Central Region concluded their tidal black bass surveys by sampling randomly selected sites in the Gunpowder River, Foster Branch, Bush River, Otter Creek, Sue Creek, Frog Mortar Creek, Middle River, Dundee Creek, Saltpeter Creek, and Swan Creek. Multiple year classes of largemouth bass from YOY were collected in all river systems. Northern snakeheads were found in all river systems.

Biologists attended the Major League Fishing tournament held on the Potomac River at Smallwood State Park. The winning angler weighed in a three-day total of 14 fish weighing 47 pounds, 7 ounces. Biologists were able to inform anglers of the Potomac River bass tagging project, aimed at estimating tag reporting rates.